Development of Water Management Index

766. SHRI MANOJ BHATTACHARYA: Will the Minister of WATER RESOURCES be pleased to state:

(a) whether the National Geophysical Research Institute (NGRI) has decided to apply Geographic Information Systems (GIS) to develop a Water Management Index (WMI) in order to ensure optimum utilization of ground water resources;

(b) if so, the details thereof;

(c) whether it is a fact that, besides, assisting in tapping and management of water resources, the GIS would also be useful in assessing and analysing any underground wealth including mineral resources, natural gas and crude oil; and

(d) whether any pilot projects has been executed to judge its suitability of GIS and if so, the details thereof?

THE MINISTER OF STATE IN THE MINISTRY OF WATER RESOURCES (SHRIMATI BIJOYA CHAKRAVARTY): (a) and (b) The National Geophysical Research Institute (NGRI) has prepared a proposal to apply Geographic Information System (GIS) for various studies related to ground water exploration, assessment and management in selected watersheds situated in granitic and basaltic areas, through a networked project, in association with the Central Ground Water Board (CGWB).

(c) The GIS is a powerful computer aided tool, and is being widely used for several applications related to earth sciences besides ground water such as assessment and analysis of sub-surface mineral resources, natural gas, oil, etc.

(d) The NGRI has made use of the GIS tool for ground water management studies in the Maheshwaram watershed selected as a pilot project situated in granitic terrain, about 40 km. away from Hyderabad.